ABSTRACT

A fuel cell system includes a fuel cell (9), an exhaust gas circulation passage (10) which circulates part of the exhaust gas from the fuel cell (9) back to the fuel cell (9), a fuel injector (3) which injects liquid fuel into the circulated exhaust gas, and a vaporizer (4) which vaporizes the injected fuel. The fuel cell system has a high response, as the liquid fuel injected into the exhaust gas rapidly vaporizes.